WHAT IS CLAIMED:

1. A method for determining the effect of at least one biological agent on neural precursor cells comprising:

(a) dissociating mammalian neural tissue containing at least one multipotent stem cell,

(b) proliferating said multipotent stem cell in a culture medium containing at least one growth factor to obtain a culture of proliferated precursor cells,

(c) contacting said proliferated precursor cells with said biological agent, and

(d) determining the effects of said biological agent on said precursor cells.

2. The method of claim 1 wherein said growth factor is selected from the group consisting of EGF, bFGF, or a combination of EGF and bFGF.

3. The method of claim 1 wherein said culture medium is defined.

4. The method of claim 1 wherein said mammalian neural tissue is obtained from a postnatal mammal.

5. The method of claim 1 wherein said mammalian neural tissue is obtained from a human donor.

6. The method of claim 5 wherein said human is afflicted with a neurological disease or disorder.

7. The method of claim 6 wherein said biological agent is a potential therapeutic agent for said neurological disease or disorder.

8. The method of claim 7 wherein said neurological disease or disorder is selected from the group consisting of Alzheimer's Disease, Parkinson's Disease, or Down's Syndrome.

9. The method of claim 1 or 6 wherein said effects of step (d) are determined by comparing a gene library of the proliferated precursor cells of step (c) which have been contacted with said biological agent with a gene library of the proliferated precursor cells of step (b) which have not been in contact with said biological agent.

10. A method for determining the effect of at least one biological agent on the differentiation of neural cells comprising:

(a) dissociating mammalian neural tissue containing at least one multipotent stem cell,

(b) proliferating said multipotent stem cell in a first culture medium containing at least one growth factor to obtain a culture of proliferated precursor cells,

(c) inducing said proliferated precursor cells to differentiate in a second culture medium in the presence said biological agent, and

(d) determining the effects of said biological agent on the differentiation of said precursor cells.

11. The method of claim 10 wherein said growth factor is selected from the group consisting of EGF, bFGF, or a combination of EGF and bFGF.

12. The method of claim 10 wherein said first culture medium is defined.

13. The method of claim 10 wherein said mammalian neural tissue is obtained from a juvenile or adult.

14. The method of claim 10 wherein said mammalian neural tissue is obtained from a human donor.

15. The method of claim 16 wherein said human is afflicted with a neurological disease or disorder.

16. The method of claim 16 wherein said biological agent is a potential therapeutic agent for said neurological disease or disorder.

17. The method of claim 16 wherein said neurological disease or disorder is selected from the group consisting of Alzheimer's Disease, Parkinson's Disease, or Down's Syndrome.

18. The method of claim 10 or 15 wherein said effects of step (d) are determined by comparing a gene library of the proliferated precursor cells of step (c) which have been contacted with said biological agent with a gene library of the proliferated precursor cells of step (b) which have not been in contact with said biological agent.

19. The method of claim 10 wherein said proliferated precursor cells are induced to differentiate in the presence of a trophic factor to manipulate the phenotype of said differentiated cells.

20. The method of claim 10 wherein said second culture medium comprises a glial feeder-cell layer.

21. A method for determining the effect of at least one biological agent on differentiated neural cells comprising:

(a) dissociating mammalian neural tissue containing at least one multipotent stem cell,

(b) proliferating said multipotent stem cell in a first culture medium containing at least one growth factor to obtain a culture of proliferated precursor cells,

(c) inducing said proliferated precursor cells to differentiate in a second culture medium to obtain a culture of differentiated neural cells,

(d) contacting said differentiated neural cells with a biological agent, and

(e) determining the effects of said biological agent on said differentiated neural cells.

22. The method of claim 21 wherein said growth factor is selected from the group consisting of EGF, bFGF, or a combination of EGF and bFGF.

23. The method of claim 21 wherein said first culture medium is defined.

24. The method of claim 21 wherein said mammalian neural tissue is obtained from a juvenile or adult.

25. The method of claim 21 wherein said mammalian neural tissue is obtained from a human donor.

26. The method of claim 25 wherein said human is afflicted with a neurological disease or disorder.

27. The method of claim 26 wherein said biological agent is a potential therapeutic agent for said neurological disease or disorder.

28. The method of claim 26 wherein said neurological disease or disorder is selected from the group consisting of Alzheimer's Disease, Parkinson's Disease, or Down's Syndrome.

29. The method of claim 21 or 26 wherein said effects of step (e) are determined by comparing a gene library of the differentiated neural cells of step (d) which have been contacted with said biological agent with a gene library of the differentiated neural cells of step (c) which have not been in contact with said biological agent.

30. The method of claim 21 wherein said proliferated precursor cells are induced to differentiate in the presence of a trophic factor to manipulate the phenotype of said differentiated cells.

31. The method of claim 21 wherein said second culture medium comprises a glial feeder-cell layer.

32. A cDNA library prepared from neural cells.

33. The cDNA library of claim 32 wherein said neural cells are neural stem cells.

34. The cDNA library of claim 32 wherein said neural cells are precursor cells.

35. The cDNA library of claim 32 wherein said neural cells are differentiated cells selected from the group consisting of neurons, astrocytes, and oligodendrocytes.

36. The cDNA library of claim 32 wherein said neural cells are derived from a human afflicted with a neurological disease or disorder.